

REMARKS

No Claims have been canceled. Claims 36-41, 43, 48-50, 54, 57-58, 60-62, and 64 have been amended. New Claim 66 has been added. Claims 36-55 and 57-66 are now in the application. Reconsideration of the application is requested in light of the foregoing amendments and following remarks.

The examiner indicated that Claims 50-53, 60, and 64 contain allowable subject matter. The indication of allowable subject matter is appreciated.

Rejection of Claims under 35 U.S.C. §112, 2nd Paragraph

Claims 36-55, 57-61, and 64 stand rejected under 35 U.S.C. §112, 2nd Paragraph as indefinite.

Regarding Claim 36, the examiner stated that there is insufficient antecedent basis for "*the respective web of sheet material*" in line 14, and that the previously recited limitation is "*at least one web of sheet material.*" claim 36 has been amended at line 14 to reflect the previously recited limitation, obviating the rejection.

Regarding Claim 41, the examiner stated that there is insufficient antecedent basis for "such pigment" in line 2. Claim 41 has been amended to recite pigment additive as antecedent basis for the recitation of interest in line 2, and the recitation of interest in line 2 has also been amended to recite pigment additive, obviating the rejection.

Regarding Claim 49, the examiner stated that there is insufficient antecedent basis for "*said passages*" in line 16 and that the previously recited limitation is "*said discrete passages*". The paragraph containing the language referred to has been deleted from Claim 49, obviating the rejection to Claim 49. Corresponding language has been included in new Claim 66 wherein the passages are specifically referred to as *said discrete passages*. Accordingly, applicant submits that this basis of rejection has been obviated in Claim 49 and has been avoided in the wording of new Claim 66.

Regarding Claims 57 and 61, the examiner stated that the word "thereof" in the phrase "tapering ends thereof" is unclear. The word "thereof" has been replaced with the sub-phrase of said passages such that the entire phrase now reads tapering ends

of said passages. Applicants submit that the amended language is clear, and respectfully requests that the rejection be withdrawn.

Further regarding Claim 61, the examiner stated that there is insufficient antecedent basis for "the tapering ends" in line 13. Claim 61 has been amended to recite such passages having feet at ends of such passages. Applicants submit that Claim 61 now has proper antecedent basis for the recited language.

Regarding Claims 60 and 64, the examiner stated that the phrase "such as" renders the claims indefinite. The phrase "such as" has been deleted from Claims 60 and 64.

Rejection of Claims under 35 U.S.C. §102

Claims 36-41 stand rejected under 35 U.S.C. §102 as being anticipated by Karami (4,055,180). Applicants respectfully traverse all such rejections.

Claim 36 has been amended to recite said undulating layer comprising elongate undulations defining elongate open flow channels between said undulating layer and underlying and overlying elements of said absorbent article which are in contact with said undulating layer.

While one can argue (applicants do not accept such argument) that the areas between regions 58 constitute applicants' claimed undulating layer, it is clear that neither Karami, nor any other reference, teaches or suggests the claimed open flow channels between the undulating layer and underlying and overlying elements of the absorbent article. Accordingly, applicants submit that the rejection based on Karami has been overcome, and respectfully request that the rejection of Claim 36 be withdrawn.

With respect to Claim 37, the examiner refers to openings 74 in Karami. Applicant respectfully traverses the rejection, and points out that openings 74 in Karami are in the body side liner/top sheet, not in a layer which is internal to the absorbent article as in the claimed invention. Applicants submit that openings 74 in a body side liner/top sheet cannot make obvious use of openings in a layer which is internal to the absorbent article, whereby the rejection of Claim 37 is fatally flawed without any amendment to Claim 36 from which Claim 37 depends. Accordingly,

applicants respectfully request that the rejection of Claim 37 on the basis of Karami be withdrawn.

Regarding Claim 38, the examiner refers to an asserted "undulating" layer 56 of Karami. Applicants respectfully traverse the rejection, and do not acknowledge that layer 56 comprises an "undulating" layer. However, in order to resolve this issue, Claim 38 has been amended to recite that the undulating layer selectively facilitates transfer of fluid longitudinally, along the length of said absorbent article. The structure of Karami has no selectivity in any direction of facilitating transfer of liquid, whereby Claim 38 as amended clearly overcomes the reference. Applicants respectfully request withdrawal of the rejection of Claim 38.

Regarding Claim 39, the examiner states that the undulating layer 56 comprises transport channels extending along a longitudinal direction of the absorbent article. Applicants respectfully traverse the rejection. However, in order to positively resolve this issue, Claim 39 has been amended to recite elongate and generally continuous transport channels. Applicant submits that Karami does not teach or suggest any channels. However, even assuming for the sake of argument that Karami does teach or suggest channels, it is clear that Karami does not teach or suggest either elongate channels or generally continuous channels. Accordingly, the rejection is clearly overcome, and applicant respectfully requests withdrawal of the rejection of Claim 39.

Regarding Claim 40, the examiner stated that undulating layer 56 comprises an undulating strip which is connected to the liquid distribution layer. Applicants respectfully traverse the rejection. However, in order to positively resolve this issue, Claim 40 has been amended to recite the undulating strip of material defining elongate undulations therein. Karami does not teach or suggest elongate undulations, whereby the rejection is overcome. Applicants respectfully request withdrawal of the rejection of Claim 40.

Regarding Claim 41, the examiner stated that undulating layer 56 comprises natural fibers, which inherently contain pigment and are capable of preventing visible discernment of the liquid storage layer 32. Applicants respectfully traverse both the assertion that natural fibers inherently contain pigment and the assertion that the natural fibers/naturally occurring pigment is capable of preventing visible discernment of the liquid storage layer.

Regarding pigment being inherently contained in natural fibers, applicants respectfully refer to the definition of pigment, wherein pigment is defined in the dictionary as a substance which is generally insoluble in a carrier with which it is mixed, such as in paints. Applicants respectfully submit that such definition does not admit of colored molecules which happen to be contained in a naturally-occurring material such as the fiber referred to by the examiner. While such colored molecules can be properly referred to as "colorants", such materials are not "pigments" within the dictionary definition. Accordingly, the rejection is fatally flawed on its face and should be withdrawn without further ado.

Further, applicants submit that it is well known in the absorbent article art that natural fiber layers lose ability to hide colors as the fiber layers become wetted. Accordingly, even if the natural fibers do contain enough colorant to hide visible discernment when such layer is dry, or if a sufficiently thick layer is used, the hiding capability can be compromised as the layer becomes wet.

However, in order to positively resolve this issue, Claim 41 has been amended to recite colored pigment additive, which is beyond the teaching imputed to the reference by the examiner. Applicants further submit that colored pigment additive cannot be properly imputed to the reference, whereby the rejection is clearly overcome. Applicants respectfully request withdrawal of the rejection of Claim 41.

Regarding Claim 43, the examiner stated that since the applicant has not defined the dimensions of the front, rear, and central areas, the areas may be defined such that the front area and rear area have a greater volume than the central area, and are therefore able to retain a higher volume of liquid. Applicants respectfully traverse the rejection.

Nevertheless, in order to positively resolve the rejection, Claim 43 has been amended to recite the liquid storage layer having a higher liquid retention capacity per unit area of said absorbent article in one or both the front area and the rear area than in the central area. The reference clearly has no teaching of different levels of liquid retention capacity based on unit area whereby Claim 43 is patentable over the reference. Accordingly, applicants respectfully request withdrawal of the rejection of Claim 43.

Claims 36-43 stand rejected as anticipated by Cohen et al (5,569,226). Applicants respectfully traverse all such rejections.

Claim 36 has been amended to recite said undulating layer comprising elongate undulations defining elongate open flow channels between said undulating layer and underlying and overlying elements of said absorbent article which are in contact with said undulating layer. Cohen et al do not have open flow channels between the undulating layer 20 and any underlying element of the absorbent article. Rather, the undulating layer 20 of Cohen et al is in surface-to-surface contact with the underlying layer 22, which the examiner has called a liquid distribution layer. Accordingly, applicants submit that the rejection of Claim 36 on the basis of Cohen et al has been overcome, and respectfully request withdrawal of the rejection.

Regarding Claim 37, the examiner asserts that the openings in Cohen et al are formed mechanically during the mechanical air-laying of the web. Applicants respectfully traverse the rejection. However, in order to positively resolve the issue, Claim 37 has been amended to recite a timing limitation, namely that the openings are formed subsequent to formation of said at least one web of sheet material. Claim 37 thus clearly distinguishes over the reference. Applicants respectfully request withdrawal of the rejection of Claim 37 based on Cohen et al.

Regarding Claim 38, the examiner states that the undulating layer 20 [of Cohen et al] facilitates the transfer of fluid into the front area and the rear area of the absorbent article, and refers to column 2 lines 59-61. Applicants respectfully traverse the rejection. A careful read of column 2 lines 59-61 reveals that the reference teaches there that the absorbent article *"will quickly absorb body fluids, especially gushes of fluids, and strongly contain the absorbed fluids."* Nowhere does the reference teach or suggest any "selection" of direction of movement of the liquid, or any "transfer" of fluid into the front area or the rear area of the absorbent article, both as recited in Claim 38.

However, in order to make the distinction between Claim 38 and the reference very clear, Claim 38 has been amended to recite that the undulating layer selectively facilitates transfer of fluid longitudinally, along the length of said absorbent article. The reference fails to teach any selective and/or longitudinal transfer of the liquid, whereby Claim 38 is patentable over the reference. Withdrawal of the rejection of Claim 38 on the basis of Cohen et al is respectfully requested.

Regarding Claim 40, the examiner stated that the undulating layer 20 comprises an undulating strip of material which is connected to the liquid distribution layer 22, as shown in FIGURE 4. Applicants respectfully traverse the rejection. Nevertheless, in order to positively resolve this issue, Claim 40 has been amended to recite the undulating strip of material being connected at spaced locations to said liquid distribution layer. Cohen et al do not teach or suggest the undulating strip being connected to the liquid distribution layer 22 at spaced locations.

Rather, Cohen et al teach the undulating strip being in full surface-to-surface contact with the liquid distribution layer. Accordingly, claim 40 is patentable over Cohen et al. Applicants respectfully request that the rejection of Claim 40 on the basis of Cohen et al be withdrawn.

Regarding Claim 41, the examiner stated that undulating layer 20 comprises natural fibers, as disclosed in column 6, lines 15-19, which inherently contain pigment and are capable of preventing visible discernment of the liquid storage layer 24. Applicants respectfully traverse both the assertion that natural fibers inherently contain pigment and the assertion that the natural fibers/naturally occurring pigment is capable of preventing visible discernment of the liquid storage layer.

Regarding pigment being inherently contained in natural fibers, applicants respectfully refer to the definition of pigment, wherein the dictionary definition of pigment is a substance which is generally insoluble in a carrier with which it is mixed, such as in paints. Applicants respectfully submit that such definition does not admit of colored molecules which happen to be contained in a naturally-occurring material such as the fibers referred to by the examiner. While such colored molecules can be properly referred to as "colorants", such materials are not "pigments" within the dictionary definition. Accordingly, the rejection is fatally flawed on its face and should be withdrawn without further ado.

Further, applicants submit that it is well known in the absorbent article art that natural fiber layers lose ability to hide colors as the fiber layers become wetted. Accordingly, even if the natural fibers do contain enough colorant, or if a sufficiently thick layer is used, to hide visible discernment when such layer is dry, the hiding capability can be compromised as the layer becomes wet.

However, in order to positively resolve this issue, Claim 41 has been amended to recite colored pigment additive, which is beyond the teaching imputed to the

reference by the examiner. Applicants further submit that colored pigment additive cannot be properly imputed to the reference, whereby the rejection is clearly overcome. Applicants respectfully request withdrawal of the rejection of Claim 41 on the basis of Cohen et al.

Regarding Claim 42, the examiner stated that the web of sheet material comprises an uncreped through-air-dried material, as disclosed in column 6, lines 43-35 [sic]. First, given the examiner's written statement, it is unclear what text the examiner is referring to in column 6. However, a thorough search of all of column 6 failed to reveal any reference to an uncreped through-air-dried material. Applicants respectfully point out that *uncreped through-air-dried* is a well-known term of art in the paper industry, and refers to materials made by a specific class of drying processes, in combination with a lack of creping of the resultant material. Cohen et al are silent as to such material, whereby the rejection is fatally flawed on its face, whereby Claim 42 has not been amended in response to this basis of rejection. Since the rejection is fatally flawed on its face, as pointed out above, applicants respectfully request withdrawal of the rejection of Claim 42 on the basis of Cohen et al.

Regarding Claim 43, the examiner stated that since the applicant has not defined the dimensions of the front, rear, and central areas, the areas may be defined such that the front area and rear area have a greater volume than the central area, and are therefore able to retain a higher volume of liquid. Applicants respectfully traverse the rejection.

Nevertheless, in order to positively resolve the rejection, Claim 43 has been amended to recite the liquid storage layer having a higher liquid retention capacity per unit area of said absorbent article in the respective one or both of the front area or the rear area, than in the central area. The reference clearly has no teaching of different levels of liquid retention capacity based on unit area whereby Claim 43 is patentable over Cohen et al. Accordingly, applicants respectfully request withdrawal of the rejection of Claim 43 on the basis of Cohen et al.

Claims 49, 54-55, 57-59, and 61 stand rejected under 35 U.S.C. 102(e) as being anticipated by Trombetta et al (5,603,707). Applicants respectfully traverse all such rejections.

The examiner stated, apparently referring to Claim 49, that Trombetta et al discloses an absorbent article having, along with other elements, a liquid distribution layer 27. Applicants respectfully traverse this statement.

As a first level of response, applicants respectfully point out that Claim 49 recites, not just a distribution layer, but also recites the passages promoting movement of liquid toward the liquid-impermeable layer.

Trombetta et al disclose a layer 27 which Trombetta et al call a "*re-wet barrier*". Layer 27 is clearly a barrier layer, not a distribution layer. In any event, applicant suspects that the examiner is considering capillaries 41 as *distribution* elements. Under any analysis, layer 27 does not promote movement of liquid toward the corresponding back sheet 23. Rather, the most that can be said for layer 27 is that the capillaries do not impede flow of liquid but that the capillary walls 42 do actually impede flow of liquid. Thus, overall, layer 27 of Trombetta et al is at least a modest impediment to flow of liquid, and the capillaries certainly do not promote flow of liquid.

Claim 49 has nevertheless been amended to recite structure in terms of zones of relatively greater fiber density adjacent the discrete passages, as shown e.g. at FIGURES 3A, 3B, and 5. Trombetta et al do not teach or show any fiber density at or adjacent capillaries 41, much less a specific or greater fiber density. Indeed, Trombetta et al teach layer 27 as being a polymeric web. See column 7 lines 50-53. Accordingly, the reference fails to teach or suggest a fibrous web, or any greater fiber density about the capillaries. Claim 49 is thus patentable over the reference. Withdrawal of the rejection of Claim 49 on the basis of Trombetta et al is respectfully requested.

Regarding Claim 54, the examiner stated that since the applicant has not defined the dimensions of the front, rear, and central areas, the areas may be defined such that the front area and rear area have a greater volume than the central area, and are therefore able to retain a higher volume of liquid. Applicants respectfully traverse the rejection.

Nevertheless, in order to positively resolve the rejection, Claim 54 has been amended to recite the liquid storage layer having a higher liquid retention capacity per unit area of said absorbent article in the respective at least one of the front area and the rear area than in the central area. The reference clearly has no teaching of

different levels of liquid retention capacity based on unit area whereby Claim 54 is patentable over the reference. Accordingly, applicants respectfully request withdrawal of the rejection of Claim 54 on the basis of Trombetta et al.

Regarding Claim 55, Claim 55 is patentable based on its dependence from Claim 49, as well as on its own merits.

Regarding Claim 57, the examiner stated that Thompson discloses passages have feet at the tapering ends, and the feet are in contact with the liquid storage layer, as shown in FIGURE 4. Applicants respectfully traverse the rejection.

Nevertheless, Claim 57 has been amended to recite the feet being in contact with the liquid storage layer at an outer surface of the liquid storage layer. Thompson teaches the feet buried in the liquid storage layer, whereby that portion of the liquid storage layer which is above the feet can receive liquid for storage thereat only by reversal of the direction of flow of the liquid, against the pull of gravity.

Thompson does not teach or suggest having the feet contact the liquid storage layer at an outer surface of the liquid storage layer, as taught in applicants' specification and drawings, and as now recited in Claim 57. Accordingly, Claim 57 is patentable over Trombetta et al, even considering the full teaching of Thompson. Applicants respectfully request withdrawal of the rejection of Claim 57 on the basis of Trombetta et al, whether with or without combining the teaching of Thompson.

Regarding Claim 58, the examiner stated that the passages of the liquid distribution layer 27 are disposed in the front area and the rear area of the absorbent article. Applicants respectfully traverse the rejection.

Claim 58 recites that the passages are disposed exclusively in one or both of the front area and the rear area. The reference makes no such distinction. In order that the meaning of exclusively be perfectly clear, Claim 58 has been amended to recite that the central area is devoid of the feet. The reference does not teach or suggest any distinction in the central area of the absorbent article wherein the central area is devoid of feet, whereby Claim 58 is allowable over the reference. Withdrawal of the rejection of Claim 58 on the basis of Trombetta et al is respectfully requested.

Regarding Claim 59, the examiner stated that the absorbent article 20 comprises a sanitary pad, as disclosed in column 2, lines 45-49. Applicants respectfully traverse the rejection. Claim 59 is allowable on the basis of its dependence from allowable Claim 49, as well as on its own merits.

Regarding Claim 61, the examiner makes two points. First, the examiner states that the passages of the reference are tapered. In order to focus the examiner's attention on the critical elements of Claim 61, Claim 61 has been amended to eliminate the limitation that the feet need to be tapered, whereby the above basis of rejection is rendered moot.

Rather, the examination of Claim 61 should be focused on the areas of separation between the liquid distribution layer and the liquid storage layer. On this issue, the examiner has impliedly stated, incorrectly and without basis, that because the layers are layers, an area of separation inherently exists between the layers. Applicants respectfully traverse that statement or implication.

The examiner in essence suggested that applicants insert a limitation of a gap between the layers. Applicants decline to add such limitation. However, applicants have amended Claim 61 to recite that the liquid distribution layer and the liquid storage layer are spaced from each other at areas of separation.

The reference does not teach or suggest any areas of separation between the layers, whereby Claim 61 is allowable over the reference. Accordingly, applicants respectfully request withdrawal of the rejection of Claim 61 on the basis of Trombetta et al, and allowance of Claim 61.

Applicants thus submit that all rejections based on 35 U.S.C. 102 have been overcome. Applicants respectfully request withdrawal of all rejections based on 35 U.S.C. 102, and allowance of the respective claims.

Rejection of Claims under 35 U.S.C. §103

Dependent Claims 44 and 45 stand rejected under 35 U.S.C. §103 as being unpatentable over Karami (4,055,180) as applied to Claim 36 above. Applicants respectfully traverse the rejection.

As a first point of response, Claims 44 and 45 are allowable on the basis of the allowability of the allowable independent Claim 36 from which they depend.

Regarding the merits of Claims 44 and 45, the examiner stated that it would...be obvious ...to join the liquid distribution layer and the liquid storage layer of Karami by means of compression, in order to have a secure and economical bond.

Applicants respectfully point out that Karami compresses the layers together for the purpose of forming layer-to-layer bonds as the examiner has acknowledged. The examiner states that it would be obvious in applicants' invention to compress the layers together in order to have a secure and economical bond.

However, applicants' objective was not to form a bond, but rather to enhance liquid transfer from the liquid distribution layer to the liquid storage layer. Applicants submit that since Karami teaches compression for the purpose of bonding, and since applicants' objective was not bonding, the teaching of Karami would be of no interest to the artisan seeking structure for enhancing liquid transfer. Karami does not teach or suggest that his compression enhances liquid transfer, whereby Karami cannot make obvious the invention claimed in Claims 44 and 45. Accordingly, Claims 44 and 45 are patentable over Karami, both on the basis of allowable Claim 36 from which they depend, and on their own merits, as stated above. Applicants respectfully request withdrawal of the rejection of Claims 44 and 45 on the basis of Karami under 35 U.S.C. 103.

Claims 46 and 47 stand rejected as unpatentable over Karami, and further in view of Chappell et al. Applicants respectfully traverse the rejection. Claims 46 and 47 are allowable over the references on the basis of their dependence from allowable Claim 36, as well as on their own merits. Withdrawal of the rejection of Claims 46 and 47 on the basis of Karami and Chappell et al is respectfully requested.

Claims 46 and 47 stand rejected as unpatentable over Cohen et al, and further in view of Chappell et al. Applicants respectfully traverse the rejection. Claims 46 and 47 are allowable over the references on the basis of their dependence on allowable Claim 36, as well as on their own merits. Withdrawal of the rejection of Claims 46 and 47 on the basis of Cohen et al and Chappell et al is respectfully requested.

Claim 48 stands rejected under 35 U.S.C. 103 as being unpatentable over Karami in view of Ahr et al. Applicants respectfully traverse the rejection.

Claim 48 is patentable on the basis of its dependence from allowable Claim 36, as well as on its own merits. Specifically, Claim 48, through Claim 36, teaches that the liquid distribution layer is between the undulating layer and the liquid-impermeable layer. Thus, applicants' liquid distribution layer is an internal layer in the absorbent article, and has other layers on both of its major opposing surfaces.

By contrast, the liquid distribution layer of Ahr et al is the top sheet, otherwise known as the body side liner, which forms an exterior surface of the absorbent article. In order for the examiner's asserted obviousness to be supportable, the examiner must provide the logic bridge between a liquid receiving layer at the outside surface of the absorbent article, and a liquid distribution layer which is wholly contained inside the absorbent article, and wherein the liquid must pass through at least one other layer before it reaches the liquid distribution layer.

Ahr et al teach their layer as effecting initial reception of liquid into the absorbent article. What would be the function or purpose of such layer on the interior of the absorbent article? The examiner has not said. Indeed, the examiner has provided no logic, no basis, which addresses the obviousness of repositioning such a layer on an interior of the absorbent article.

Absent such analysis path, the examiner has failed to make a case of prima facie obviousness, whereby applicants decline to make any amendment on the basis of this rejection. Rather, applicants submit that the examiner is obligated under the law to either provide such logic in a non-final official action, or to withdraw the rejection. Withdrawal of the rejection is respectfully requested.

Claim 48 stands rejected under 35 U.S.C. 103 as being unpatentable over Cohen et al in view of Ahr et al. Applicants respectfully traverse the rejection.

Claim 48 is patentable on the basis of its dependence from allowable Claim 36, as well as on its own merits. Specifically, Claim 48, through Claim 36, teaches that the liquid distribution layer is between the undulating layer and the liquid-impermeable layer. Thus, applicants' liquid distribution layer is an internal layer in the absorbent article, and has other layers on both of its major opposing surfaces.

By contrast, the liquid distribution layer of Ahr et al is the top sheet, otherwise known as the body side liner, which is on the exterior surface of the absorbent article. In order for the examiner's asserted obviousness to be supportable, the examiner must provide the logic bridge between a liquid receiving layer at the outside surface of the absorbent article, and a liquid distribution layer which is wholly contained inside the absorbent article, and wherein the liquid must pass through at least one other layer before it reaches the liquid distribution layer.

Ahr et al teach their layer as effecting initial reception of liquid into the absorbent article. What would be the function or purpose of such layer on the interior

of the absorbent article? The examiner has not said. Indeed, the examiner has provided no logic, no basis, which addresses the obviousness of repositioning such a layer on an interior of the absorbent article.

Absent such analysis path, the examiner has failed to make a case of prima facie obviousness, whereby applicants decline to make any amendment on the basis of this rejection. Rather, applicants submit that the examiner is obligated under the law to either provide such logic in a non-final official action, or to withdraw the rejection. Withdrawal of the rejection is respectfully requested.

Claims 62, 63, and 65 stand rejected under 35 U.S.C. 103 as being unpatentable over Abuto et al (5,788,684) in view of Ahr et al (4,323,069). Applicants respectfully traverse the rejection.

The examiner stated that the openings 18 of the first take-away layer 15 and second take-away layer 17 are spaced laterally from each other, as shown in figure 4, thus preventing a direct path for liquid. The openings 18 are shown in figure 1 as having a cylindrical shape. Applicants respectfully traverse the rejection.

First, FIGURE 4 does not show the openings spaced from each other. Rather, FIGURE 4 shows the openings in edge-to-edge contact, and shows no space between the openings.

The examiner refers to figure 1, noting that the openings are cylindrical in shape. While FIGURE 1 does show openings of elongate cylindrical shape, it is clear from the specification that figure 1 represents only a single "take-away" layer. See column 4 line 33 where it is clear that figures 1 and 2 are the same embodiment and figure 2 clearly represents only one "take-away" layer. So the most that can be said for figure 1 is that it shows an oval shape opening in a single take-away layer.

No drawing shows any plan view depiction for any embodiment where 2 take-away layers are used, with apertures in both layers, as in the cross-sections of figures 3 and 4. Said another way, the reference does not teach any plan-view structure for the openings where two layers have openings. The reference does not disclose the plan view outline of the openings in figure 4. The examiner is not entitled to impute a structure of convenience, but is limited to what the reference teaches. And the reference does not teach what structure is used where two apertured layers are used in the structure. The reference specifically does not show or teach a structure where

the openings are spaced from each other. The examiner cannot point to any space between the openings in figure 4 or any other structure in the reference.

However, in order to more clearly distinguish Claims 62, 63, and 64 from the reference, Claim 62 has been amended to recite layer-to-layer surface interface between a said opening on said first take-away layer and any said opening on said second take-away layer. Abuto et al fails to teach or suggest any such layer-to-layer surface interface between openings. Ahr et al do not cure the defects of Abuto et al, whereby Claim 62, and Claims 63 and 64 dependent therefrom, are allowable over the references, whether taken alone or in combination.

Further with respect to Claim 63, the examiner stated that Abuto discloses an uppermost layer 12 that is void of any funnel-shaped openings, as shown in figure 1. Applicants traverse the statement. Layer 12 of Abuto et al is the top sheet, also known as the body side liner. By contrast, claim 63 clearly defines the uppermost layer as being between the top sheet/bodyside liner and the take-away layer. Thus, even if the structure of Abuto et al is used, such structure does not arrive at the layer structuring recited in Claim 63; whereby the inquiry never arrives at the invention. Accordingly, Claim 63 is allowable over the references. Withdrawal of the rejection of Claim 63 is respectfully requested.

The rejection of Claim 65 is similarly flawed in that the layer of Abuto et al is limited to the body side liner location. There is no incentive, no direction for applying such layer on an interior location in the absorbent article. Accordingly, Claim 65 is allowable on its own merits in addition to being allowable on the basis of its dependence from allowable Claim 62.

Claims 50, and Claims 51=53 and 60 dependent therefrom, have been indicated to contain allowable subject matter. Claim 50 has been placed in independent for, whereby Claim 50 and the claims dependent therefrom are in condition for allowance. Allowance of Claims 50-53 and 60 are respectfully requested.

Applicants thus submit that all bases of rejection and objection have been overcome, and that all claims as presented herein are allowable over all references of record. Allowance of all claims is respectfully solicited.

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A fee of \$84 is due for the 1 additional independent claim, namely Claim 50. A check in the amount of \$84 is inclosed herewith to pay the \$84. fee. No other fee is believed to be due. Should any other fee be properly due, or if any refund is due, kindly charge same, or credit any overpayment, to Deposit Account 23-2130.

Please feel free to contact me with any questions, comments or concerns, at the telephone number listed at the end of this document.

Respectfully submitted,
Maria Raidel et al.

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APPENDIX A
VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims

Kindly amend Claims 36-41, 43, 48-50, 54, 57-58, 60-62, and 64 as follows.

36(Twice Amended). An absorbent article having a length and a width, a front area and a rear area, and a central area between the front and rear areas, said absorbent article comprising:

- (a) a liquid-permeable layer, which is turned toward a body of a wearer during use of the absorbent article;
- (b) a liquid-impermeable layer, which is turned away from such body of such wearer during use of the absorbent article;
- (c) an undulating layer disposed between the liquid permeable layer and the liquid impermeable layer and extending between the front area and the rear area;
- (d) a liquid distribution layer disposed between the undulating layer and the liquid-impermeable layer, and extending between the front area and the rear area, said liquid distribution layer comprising at least one web of sheet material, said at least one web of sheet material having openings therein formed after fabrication of the at least one [respective] web of sheet material; and
- (e) a liquid storage layer between the liquid-impermeable layer and the liquid distribution layer, said liquid distribution layer transferring fluid to at least part of the liquid storage layer located in one or both the front area and the rear area of the absorbent article.

said undulating layer comprising elongate undulations defining elongate open flow channels between said undulating layer and underlying and overlying elements of said absorbent article which are in contact with said undulating layer.

37(Amended). An absorbent article as in Claim 36, said openings in said at least one web of sheet material being mechanically-formed openings formed subsequent to formation of said at least one web of sheet material.

38(Twice Amended). An absorbent article as in Claim 36 wherein the undulating layer selectively facilitates transfer of fluid longitudinally, along the length of said absorbent article, into one or both the front area and the rear area of the absorbent article.

39(Twice Amended). An absorbent article as in Claim 36, the [undulating layer comprising] undulations being arranged so as to form elongate and generally continuous transport channels extending along the length [a longitudinal direction] of said absorbent article.

40(Twice Amended). An absorbent article as in Claim 36 wherein the undulating layer comprises an undulating strip of material defining elongate undulations therein, connected at spaced locations to said liquid distribution layer which bears the openings.

41(Amended). An absorbent article as in Claim 39 wherein the undulating layer is sufficiently colored by pigment additive [pigmented] that such pigment additive prevents visible discernment of the liquid storage layer.

43(Amended). An absorbent article as in Claim 36, said liquid storage layer extending from the central area into the front area and the rear area, the liquid storage layer having a higher liquid retention capacity per unit area of said absorbent article in the respective one or both of the front area or [and] the rear area than in the central area.

48(Amended). An absorbent article as in Claim 36, the liquid distribution layer comprising fibrous compositions about said openings, wherein the openings in the liquid distribution layer have discharge ends at a major surface of said liquid storage layer, [comprise funnel-shaped openings] for transferring fluid, such funnel-shaped openings tapering inwardly toward the liquid storage layer.

49(Twice Amended). An absorbent article having a length and a width, a front area and a rear area, and a central area between the front and rear areas, said absorbent article comprising:

- (a) a liquid-permeable layer disposed toward a body of a user during use of the absorbent article;
- (b) a liquid-impermeable layer disposed away from such body of such user during use of the absorbent article;
- (c) a liquid distribution layer, which comprises discrete passages therethrough, and zones of relatively greater fiber density of said liquid distribution layer adjacent said discrete passages, the relatively greater fiber density promoting movement of liquid toward the liquid-impermeable layer, said liquid distribution layer being disposed between the liquid-permeable layer and the liquid-impermeable layer; and

- (d) a liquid storage layer disposed between the liquid-impermeable layer and the liquid distribution layer, said liquid distribution layer transferring fluid to at least part of the liquid storage layer of the absorbent article[,

areas of said liquid distribution layer having passages defining openings (30) extending therethrough, said passages tapering inwardly toward the liquid storage layer and whereby the absorbent article (10) can transfer liquid from the liquid distribution layer (22) toward the liquid storage layer (24)].

50(Amended). An absorbent article, comprising:

- (a) a liquid-permeable layer disposed toward a body of a user during use of the absorbent article;
- (b) a liquid-impermeable layer disposed away from such body of such user during use of the absorbent article;
- (c) a liquid distribution layer, which comprises discrete passages therethrough, said discrete passages facilitating movement of liquid toward the liquid-impermeable layer; and
- (d) a liquid storage layer disposed between the liquid-impermeable layer and the liquid distribution layer, said liquid distribution layer transferring liquid to the liquid storage layer [as in Claim 49],

said liquid distribution layer comprising an undulating strip of material and an additional strip of material, [wherein] said passages being [are] arranged in edges of the additional strip of material, said edges being folded inward such that said edges are located under [underneath] the undulating strip of material.

54(Amended). An absorbent article as in Claim 49, the liquid storage layer extending from the front area to the rear area of said absorbent article, the liquid storage layer having a higher liquid retention capacity per unit area of said absorbent article in the respective at least one of the front area and the rear area of the absorbent article, than in the central area.

57(Amended). An absorbent article as in Claim 49 wherein the passages have feet at tapering ends of said passage [thereof], said feet being in contact with the liquid storage layer at an outer surface of the liquid storage layer.

58(Amended). An absorbent article as in Claim 49, the passages of the liquid distribution layer being disposed exclusively in one or both of the front area and the rear area of the absorbent article whereby the central area is devoid of the feet.

60(Amended). An absorbent article as in Claim 50 wherein the undulating strip of material contains a colorant [such as a dye].

61(Amended). An absorbent article having a front area, a rear area, and a central area between the front area and the rear area, said absorbent article comprising:

- (a) a liquid-permeable layer disposed toward a body of a wearer during use of the absorbent article;
- (b) a liquid-impermeable layer disposed away from the body of such wearer during use of the absorbent article;
- (c) a fibrous liquid distribution layer, which promotes movement of liquid toward the liquid-impermeable layer, said liquid distribution layer being

disposed between the liquid-permeable layer and the liquid-impermeable layer; and

- (d) a liquid storage layer disposed between the liquid-impermeable layer and the liquid distribution layer,

said liquid distribution layer comprising areas having passages defining openings for transferring liquid, such passages having feet at [the tapering] ends of such passages [thereof], said feet contacting [being in exclusive contact with] the liquid storage layer, and forming areas between the feet, of separation between the liquid distribution layer and the liquid storage layer where the liquid distribution layer and the liquid storage layer are spaced from each other, whereby said areas of separation attenuate reverse wicking of liquid from the liquid storage to the liquid distribution layer.

62(Amended). An absorbent article having a front area, a rear area, and a central area arranged between the front area and the rear area, said absorbent article comprising:

- (a) a liquid-permeable layer disposed toward a body of a wearer during use of the absorbent article;
- (b) a liquid-impermeable layer disposed away from such body of such wearer during use of the absorbent article;
- (c) a liquid distribution layer disposed between the liquid-permeable layer and the liquid-impermeable layer, said liquid distribution layer including at least first and second take-away layers each having funnel-shaped openings defining discrete passages therethrough which promote movement of liquid away from the liquid-permeable layer; and
- (d) a liquid storage layer disposed between the liquid-impermeable layer and the liquid distribution layer, wherein respective openings of said first take-

away layer and said second take-away layer of said liquid distribution layer are spaced laterally from each other, with layer-to-layer surface interface between a said opening on said first take-away layer and any said opening on said second take-away layer, thus preventing a direct, straight-line path for reverse wicking of fluid, whereby spacing of respective openings of said first take-away layer and said second take-away layer of said liquid distribution layer contributes to the prevention of liquid being transferred back from the liquid storage layer to the liquid distribution layer.

64. An absorbent article as in Claim 63, said liquid distribution layer further comprising an undulating strip of material disposed between the liquid-permeable layer and said uppermost layer, said undulating strip of material containing colorant[, such as dye].

Kindly add the following new Claim 66.

66(New). An absorbent article as in Claim 49 wherein said liquid distribution layer comprises discrete passages defining openings (30) extending therethrough, said discrete passages tapering inwardly toward the liquid storage layer and facilitating the absorbent article (10) in transferring liquid from the liquid distribution layer (22) toward the liquid storage layer (24).